

PLAN SUMMARY

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EASTERN LOUDOUN AREA MANAGEMENT PLAN

The Eastern Loudoun Area Management Plan offers both general policies and specific recommendations that will form the basis for future land use decisions. The purpose is to guide future development and to prepare the people of eastern Loudoun for the difficult choices and decisions that will be required to maintain the area's fine environment and make it an even better place to live.

This section is a general summary of the Plan. The reader is asked to refer to the text of the Plan for an explanation of the implementation techniques.

RESIDENTIAL DEVELOPMENT PLAN

ISSUES

Eastern Loudoun County has experienced major development in the last two decades and has grown from a rural farming area to a major suburban community with over 7,500 dwelling units and a population of over 27,000 people. Present trends suggest that residential growth will continue at a rapid pace of some 1,100 dwelling units per year which will double the eastern Loudoun area population by 1987.

This residential growth has created considerable social, environmental and fiscal strains which promise to become more acute as development erodes the informal buffers of open fields and woodland between developments. In some cases, quiet residential roads will become major thoroughways and residential and non-residential development actually will begin to rub shoulders.

IMPLEMENTATION

Loudoun County is committed to managing the character, extent and timing of this growth in order to create full, diversified communities. The County will furthermore adopt the following residential implementation strategies to achieve these goals.

1. Conditional Zoning:

Future residential zoning applications will require expanded review criteria to include environmental and existing public facility components. The review will also include a complete analysis and study of voluntarily proffered public facilities which would be needed to permit greater use intensities. The County will adopt criteria and procedures for conditional zoning.

2. Phasing of Construction:

New housing requires a broad range of new or expanded community services. The County will seek to phase new growth through the use of conditional zoning and will seek to coordinate growth with the orderly development of public facilities by means of the Capital Improvements Program.

3. Housing Variety and Costs:

The County is committed to providing a wide spectrum of housing types and price ranges. The County will seek to encourage such diversity by means of:

- a. Appropriate zoning.
- b. Proffers which will redress shortages of housing options for low and moderate income residents.
- c. Neighborhood and housing rehabilitation programs.
- d. Revision of building ordinances that restrict the rehabilitation of usable older structures.
- e. Revision of the Zoning and Subdivision Ordinances restricting development through unnecessary setbacks, road frontage and other requirements.
- f. Revision of the Zoning and Subdivision Ordinances to create new transitional zoning districts: office/commercial/residential and a zoning district midway between R-2 and R-4 to allow a gross density of three units per acre.

4. Land Development Ordinance:

The County recognizes that increasing development intensity, requires additional monitoring and review. The County will develop a new Land Development Ordinance embracing both subdivision and site plan applications.

5. Buffering and Clusters:

Loudoun County wishes to create identifiable neighborhoods and communities and equally wishes to soften the impact of one use abutting on another. Accordingly, the County will strengthen the cluster provisions of the Zoning Ordinance and encourage appropriate cluster design.

ENVIRONMENTAL PLAN

ISSUES

The natural environment of eastern Loudoun will continue to undergo steady and rapid change. If unchecked and unplanned, changes will lead not only to a loss of environmental amenities, but also to the exposure of more and more residents to lowered environmental quality and increasing levels of pollution, to rising costs for public services and corrective programs and to a foreclosure on future community options. The major threats to the environment will probably not be dramatic events which focus the energies of the environmentally conscious. A serious loss of resources in eastern Loudoun is more likely to result from a series of subtle changes to the natural environment.

It is apparent that environmental considerations have been relatively low on the list of priorities for development thus far and need a legitimate point of entry into the land use decision-making process. The advantages and the constraints of environmental features - natural and man-made -- should be pivotal rather than incidental to the planning and design of new developments. In an area in which many land use decisions may affect the water supplies of northern Virginia, the validity of programs to protect the natural environment from human disruptions is clear. Likewise, in a growing population center such as eastern Loudoun, the County's responsibility to protect current and future residents from the hazards of the environment is undeniable.

The recommendations discussed at length in the complete Area Plan and highlighted here offer direction and a framework for environmental protection.

IMPLEMENTATION

1. Critical Areas:

Through amendments to the Zoning Ordinance, the County will designate and preserve the critical, undevelopable areas in eastern Loudoun. These include floodplains and severe slopes as discussed in the complete Plan.

2. Zoning and Subdivision Ordinances:

The County will review and amend the Zoning and Subdivision Ordinances to implement the specific goals of the Area Plan including:

- a. Maintenance of critical areas in a undeveloped state.
- b. Exclusion of residential and other noise-sensitive uses from the NEF 40 zones and to the extent possible, the NEF 30 zones adjacent to Dulles Airport.

- c. Prevention of erosion and sedimentation problems through site design, as well as erosion control plans required under the Erosion Control Ordinance.
- d. Protection of important vegetation, particularly along stream courses, steep slopes and other areas of high erosion potential.
- e. Encouragement of development design based on preservation of natural drainage patterns.

3. Densities:

In the use of sliding scale zoning, environmental constraints and opportunities must become guiding factors in the designation of appropriate densities. That is, comparable treatment for comparable properties requires a comparison of soil, topography, hydrology and other environmental characteristics as well as considerations of location and zoning.

4. New Regulations:

A number of new approaches to environmental management are required in eastern Loudoun in part because of the relatively high concentration of population and in part because of the new types of problems presented by rapid suburban growth. The most pressing need is for a Stormwater Management Policy and Ordinance. Other needs to be addressed include a Stream Buffer Ordinance and Vegetation Protection Regulations. Also important, but of lower priority at this time, are Hillside Development Regulations.

5. Soils Assessments:

Interpretive soils information prepared by the County Soil Scientist should be used to identify problem areas. Development in designated poor potential areas must be preceded by special engineering assessments, and land use and design will be dictated by the types of actual problems uncovered.

6. Inspection and Enforcement:

Expansion of county capabilities in inspection and enforcement will be necessary and should be coordinated with the types of regulations enacted.

7. Environmental Data Base:

The County's capabilities for environmental planning should be strengthened by an expanded effort for continuous data collection and monitoring.

8. Impact Assessment:

An impact assessment procedure, related to the specific goals of the area plan, should be used for review of development proposals. An effective measurement scheme should address cumulative effects as well as those directly attributable to individual development proposals.

9. Public Acquisition of Special Environmental Resources:

Groundwork for future public acquisition programs should begin immediately with information gathering on threatened resources.

COMMUNITY DESIGN

ISSUES

Community design refers to the character of the physical structure and organization of a community, which would include housing, roads and trails, parks, woodlands and stream valleys, and the complex network of relationships between these diverse land uses and natural elements. The primary focus and concern of the community design process is to allow new development to be organized in such a way as to enhance community identity, promote energy conservation and preserve the existing natural amenities as described in the Resource Management Plan.

Sixty-five percent of eastern Loudoun (14,000 acres) is presently undeveloped. Some of the uses within this vast area include parklands, school playgrounds, floodplain, farmland and land held for speculation.

The character of eastern Loudoun's community design has many positive qualities. However some trends, problems and issues have arisen. Some of the critical ones are:

1. As the Sterling Park and Herndon areas have grown, they have begun to merge, causing a sprawling growth pattern, and loss of their visual identity as separate and district communities.
2. Virtually all development in eastern Loudoun is segregated by use, that is, commercial facilities are separated from residential areas, offices separated from retail stores, etc. Often the only way to get from one use to another, even when they are adjacent, is by auto (example: the Town Center and Sugarland Plaza Shopping Centers).
3. The architectural design and site planning of most residential developments in eastern Loudoun have not adequately taken into consideration or applied such features as proper orientation for energy conservation, road designs which will reduce auto speeds and maintenance costs, adequate trail systems, and proper landscaping and vegetation conservation.

IMPLEMENTATION

1. The County will provide density bonuses for private developers who implement design concepts and policies such as the following:
 - a. Mixed-use developments.
 - b. Donation of scenic easements.
 - c. Functional trail systems.
 - d. Energy-efficient building design.
 - e. Clustered housing units.
2. The County will develop detailed site planning standards for all residential, commercial and industrial developments. These standards will require the implementation of design principles that will reinforce the County's community design policies.
3. The county should focus on the acquisition of land for linear parks in environmentally critical and sensitive areas through dedication or purchase. In these areas, the County should give priority to such acquisition rather than to development.
4. Where possible, the County will seek proffers of land or easement dedication, and where necessary, allocate county funds for the acquisition of critical scenic lands and community buffers. The following areas should be considered for such acquisition or dedication by owners:
 - a. Land for a trail along the Broad Run floodplain.
 - b. Open space buffer along Route 637.
 - c. Park site(s) on Pocahontas property.
 - d. Remainder of Vestals Gap Road right-of-way.
 - e. Open space buffer north of the community of Sugarland Run.
5. The County should designate a 75' open space buffer on either side of the W&OD Regional Trail to preserve this open space asset from development encroachment.
6. The County will develop detailed open space specifications for public and private open space.
7. The County should obtain easements from property owners to conserve and develop Vestals Gap Road as a hiking trail.
8. The County should designate part of the Sugarland Run and the Broad Run floodplains as linear parks which would eventually be tied into a comprehensive trail system linking the Sterling area and the W&OD with the Sugarland Run area, Broad Run area and the Potomac River.

COMMERCIAL AND OFFICE PLAN

ISSUES

The future development of commercial and office facilities will significantly change the composition of development from predominantly residential to a much more balanced mix with significant employment and shopping opportunities. This new development will affect the appearance and character of eastern Loudoun. The County should strive for quality appearance of new development with attention to appearance from major highways.

The Area Plan establishes a development policy that allows for a regional shopping center while reinforcing the existing commercial areas and allowing new neighborhood commercial areas to function as a focus for future villages or activity centers.

The Plan offers three general locations as acceptable for three regional shopping centers: two on the west side of the Route 28/Route 625 intersection and one south of Route 7 between Route 637 and Route 28.

IMPLEMENTATION

1. Regional Shopping Centers:

There is a need for expansion of retail opportunities in the area, but these must be in character with the County's support facilities and needs. The Area Plan indicates that the County may approve three regional shopping centers, but the size of the largest should not exceed 1.2 million square feet. One location to the south of Route 7 between Route 637 and Route 28 and two on the west side of Route 28/Route 625 intersection, could be acceptable subject to guidelines found in this plan.

2. Reinforce Existing Centers:

The existing retail centers will be reinforced as village centers by approval of zoning changes that complement the existing commercial property and adjacent land use.

3. Neighborhood Centers:

Retail centers that promote energy efficiency on a neighborhood scale should be included in new planned communities. Eastern Loudoun may accommodate five or six new neighborhood centers in the next decade.

INDUSTRIAL PLAN

ISSUES

Industrial development and employment in the Eastern Loudoun area have increased during the last decade. However, residential development has grown even faster than local jobs, thus causing the County as a whole, and the eastern area in particular, to become even more of a "bedroom" community for employment centers in Washington and Fairfax County. The eastern trip of the County has some resource characteristics which are very attractive to several kinds of desirable industries. However, competition for industrial growth from neighboring counties, especially Fairfax, is substantial. Industrial growth can be expected to broaden the tax base and, at least in the short term, offset to some extent the net deficit in County revenues incurred by residential development.

Approximately 6,000 acres of land are zoned for industrial use in eastern Loudoun. About 1,000 acres of this land lie within environmentally sensitive areas, and about 1,500 acres are not presently within close proximity of major sewer or water trunk lines. This leaves approximately 3,500 acres of land presently available for economical industrial development.

IMPLEMENTATION

1. The County will focus on encouraging the expansion of existing industrial firms by keeping in close contact with these firms providing them with as much desired information as possible, assisting them with problems such as rezoning for expansion, obtaining adequate utilities and maintaining adequate transportation access.
2. The County will attempt to provide as many incentives as possible for county residents to work within the County, including making residents aware of local employment opportunities, making local employers aware of local work force capability, providing an adequate trails system connecting residential and employment areas, and attracting firms best suited to the local labor force.
3. The County will amend the Zoning Ordinance in order to make it more feasible for developers to create mixed-use developments.
4. The County will investigate the feasibility of increasing the allowable floor area ratio (development density) in those areas of eastern Loudoun which are the most appropriate for expanded industrial development.
5. The amount of land zoned PD-GI (Planned Development - General Industrial) should be increased in order to provide more choices for the kinds of industries that can locate in that zone.

6. A highway overlay zone will be established which puts strict controls on land uses adjacent to primary and secondary roads, including requirements for adequate buffers between the highway and any industrial operation.

TRANSPORTATION PLAN

ISSUES

The movement of people within eastern Loudoun is the largest single issue for the future viability of the area as a community. Projected traffic volumes for Route 7 are estimated at 90,000 vehicle trips per day by 1990 if the approved and pending development is constructed. These traffic figures indicate a projected decrease in level of service from D level to F level which represents congested, stop-and-go traffic. Over eight additional east-west lanes will be required by 1985. That number will increase to 12 new lanes by 1990.

The concluding recommendations for transportation are clear. Additional highway facilities are critically needed, plus increased reliance on car pools and transit use to avoid intolerable traffic congestion.¹ Future recommendations for improvements will be specified in the Final Report of the COG Study due February 1980.

IMPLEMENTATION

1. Implementation of a Transportation Improvement Program involving:
 - a. Construction of the Toll Road and a ramp structure to Dulles Access Road at Route 28 at the first opportunity to allow car pool access.
 - b. Improvement of Route 7 with additional signals, widening and free flow lanes to increase the safety and service level of the road.
 - c. Funding and construction of a park-and-ride facility at Routes 28 and 606.
2. Primary Road Improvements:
 - a. Construct Route 28 loop by developer proffer.
 - b. Endorse construction of toll road parallel with the Dulles Access Road.
 - c. Improve the Route 28 corridor to a freeway-type facility with a four-lane, median-divided cross-section. The road should have grade-separated interchanges

¹ National Capital Regional Transportation Planning Board, Eastern Loudoun County Transportation Study, July 25, 1980, page 1.

1. At Routes 7 and 28 (realigned to east).
 2. Between Routes 638 and 625 (by Broad Run).
 3. At Routes 625 and 28.
 4. At Routes 846 and 28 (full interchange).
 5. At Routes 606 and 28 (full interchange).
 6. W&OD right-of-way to be a grade-separated crossing of Route 28.
- d. Endorse Springfield Bypass construction.
3. Secondary Road Improvements:
- a. Improve Routes 604 and 625 to four-lane facilities to county line.
 - b. Improve East Frederick Drive to four lanes.
 - c. Improve Route 625 to Route 643 for two lanes of traffic with parking.
4. Industrial Access Funds for:
- Route 634.

COMMUNITY FACILITIES PLAN

ISSUES

The social, psychological and fiscal impact of an additional 5,000-7,000 residential units in eastern Loudoun would severely strain the function of the public facilities in that area unless major county expenditures are made. Existing facilities are very near capacity for schools, parks, sewer, libraries and roads. Services such as law enforcement and rescue are strained beyond their ability to provide adequate protection.

Planning Department projections indicate that the number of households will increase from 7,500 in 1979 to over 15,000 by 1990. New people will demand new services; the County's ability to provide a high quality of living that is affordable to all citizens will be challenged.

IMPLEMENTATION

1. Schools:

Approximately five new school sites, north of Route 7, will be necessary by 1990, given the projected population growth. An unspecified number of new schools south of Route 7 will also be required. The County will be required to increase the school capacity in eastern Loudoun by approximately 40-50% by 1990.

2. Fire and Rescue:

North of Route 7 a new facility for fire and rescue will be required. It should be located off of Route 637 with direct access onto that road.

3. Law Enforcement:

Extra personnel should be hired by the Sheriff's Department specifically to serve eastern Loudoun. An enlarged substation and a magistrate should be located in eastern Loudoun.

4. Parks and Recreation: Population expansion dictates:

- a. Expansion of Sterling Community Center for recreational facilities.
- b. Provision of new park facilities: priorities for implementation:
 - Multi-purpose ballfields
 - Community Centers
 - Basketball and tennis courts

5. Sewer Capacity:

Additional sewer capacity for residential and non-residential growth may be provided through:

- a. Blue Plains expansion and/or
- b. Fairfax "pumpdown" and/or
- c. Dulles Airport sewer plan

6. Libraries: Population expansion will dictate

- a. Expansion of existing Sterling Library
- b. New facility north of Route 7.

FISCAL PLAN

ISSUES

The extensive growth planned for eastern Loudoun will have a significant financial impact on all public services. Sewer, water, roads, schools and energy facilities will all be taxed in terms of capacity and design function. The ability of the County to provide the amenities of parks and recreation, fire and rescue service and law enforcement will be severely challenged by a population increase of over 5,000 units by 1985. It will be necessary to set priorities for expenditure of county funds.

Tax dollars will be scarce and the demand for additional services will be high unless the projects are phased over time. This plan offers priorities and alternatives for future needs to allow the County to determine its ability to pay for additional services.

IMPLEMENTATION

1. Priorities:

The County budget items deemed most significant area:

- a. School Facilities
- b. Law Enforcement
- c. Fire and Rescue
- d. Parks and Recreation
- e. Libraries

2. Trust Funds:

The County will establish trust funds so that private developers can defray the costs of future investments such as:

- a. Sugarland Bridge Fund
- b. Community Centers
- c. Schools

3. Capital Improvement Recommendations: (CIP)

- a. Sterling Community Center expansion
- b. New elementary schools north of Route 7
- c. High school north of Route 7
- d. Library expansion

4. Developer Proffers:

The County will use a benefit-detriment analysis to evaluate the cost of new development and offer suggestions for proffers.

5. State and Local Enabling Legislation:

New state and local legislation is needed to allow greater financial flexibility for the County. Legislation would include special tax district for specific public facilities.

HERITAGE CONSERVATION

ISSUES

The cultural heritage of eastern Loudoun County is rich in historic significance. The eastern portion of the County contains many historic structures and sites which have survived the rapid expansion of suburban growth that has occurred during the past two decades. Examples include the Vestals Gap Road, which George Washington travelled frequently, the Broad Run Bridge (ruins) and its Toll House (a National Register site) and Lowe's Island, one of the most significant archaeological sites in the region. These sites and others like them are the remaining evidence of the eastern area's cultural heritage and provide the strongest physical and visual connection that citizens of eastern Loudoun have with their past.

IMPLEMENTATION

1. Historic Sites:

The County will formally designate the remaining significant historic sites as being of local historical significance, thus establishing a county register of historic places.

2. Zoning Overlay:

The County will, with the approval of the landowners involved, include the following sites in the County's Historic District Overlay Zone:

Old Sterling
Oak Grove

3. Register Property:

The County will submit application for inclusion on the State and National Registers, of the following sites:

Old Sterling
Oak Grove
Lowes Island
Vestals Gap Road

4. Density Bonuses:

The County will provide density bonuses to developers who preserve significant, County-designated historic sites.

5. Tax Incentive Ordinance:

The County will enact an ordinance which would provide tax incentives for the substantial rehabilitation of older properties.

6. Preservation Easements:

The County will actively encourage the acquisition of preservation easements on significant scenic and historic properties.

7. Trails:

The County will require that pedestrian and bicycle trails be a part of all new developments to help produce a quality and character in keeping with that of the traditional communities of eastern Loudoun.

ENERGY PLAN

ISSUES

The energy balance of eastern Loudoun, like that of many other suburban areas, has become very precarious. A high level of demand rests on resources only recently recognized as exhaustible. The community is comprised of a large number of long-distance commuters with little or no transit options, and dependence on the automobile pervades leisure time travel as well. Although some planned, mixed development has been promoted, most residents do not have easy pedestrian access to retail services, businesses, schools, recreation areas and other facilities. A good number of homes in eastern Loudoun are dependent upon the unpredictable supply of oil, and developers' interest in alternative energy sources and passive energy design has been minimal at best. New developments continually replace an abundance of climate-moderating vegetation with energy-oblivious homes and businesses.

The consumption of energy and the vulnerability of the area to a volatile energy situation could only be expected to grow without some attempt at energy planning. This plan attempts to provide a basis for energy efficiency and conservation in the land use planning process of the future. Transportation, housing and street design, solar access and various planning alternatives are recommended for changes in the Plan. This should help to expand the energy options of the eastern area and also to promote a serious and coordinated energy planning effort on a county-wide level.

IMPLEMENTATION

1. County Energy Plan:

Develop a comprehensive County Energy Plan to coordinate and expand the diffused energy-related programs now ongoing. This should include

conservation goals and policies, transportation and land use recommendations, citizen education programs and energy emergency plans. Public and private funding sources should be investigated for planning and implementation.

2. Land Use:

Review the Zoning and Subdivision Ordinances to assure that energy efficient design and solar access in particular is possible within the planning review procedure, and explore the use of incentives and regulations to promote these alternatives. On a larger scale, promote an energy efficient mix of development types to minimize constant dependence upon the automobile.

3. Design Techniques:

Promote a variety of new design approaches including the following:

- a. Solar or passive orientation for housing, i.e., planned use of topography, vegetation, water features, etc.
- b. Pedestrian trails to activity centers.
- c. New road design standards with energy criteria.
- d. Building code revisions for energy efficient construction, e.g., upgrading of insulation requirements to R-30 in attics and R-19 in walls.

4. Alternative Energy Sources:

Encourage the use of local energy resources such as wood, corn and solid waste.

5. Fuel Economy in County Government:

Develop energy efficiency guidelines to be considered in new programs and purchases of the County.

6. County Energy Office:

Establish a full-time County Energy Office to handle crisis intervention, energy economy in county programs and problems of energy allocation and distribution.